4.4 Decimals and Fractions

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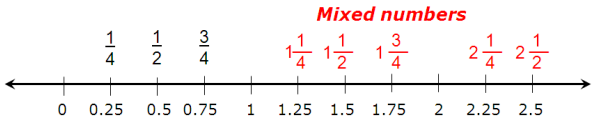
A number that contains both a whole number greater than 0 and a fraction, such as $1\frac{3}{4}$, is called a **mixed number**.



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Write each decimal as a fraction or mixed number.

0.67 $= \frac{67}{100}$

Write each decimal as a fraction or mixed number.

5.9 $5\frac{9}{10}$ mixed number

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Write each decimal as a fraction or mixed number.

0.73 $= \frac{73}{100}$

Write each decimal as a fraction or mixed number.

4.8 $4\frac{8}{10} = \frac{8 \div 2}{10 \div 2} = 4\frac{4}{5}$

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Write each fraction or mixed number as a decimal.

$\frac{3}{20}$ $\frac{3}{20}$ $3 \div 20 = 0.15$

terminating

$.15$
$20\overline{)3.00}$
-20
100
-100
0

$2\frac{5}{6}$

$0.8333\ldots$

$0.8\overline{3}$

$2.8\overline{3}$

$.833\ldots$
$6\overline{)5.000}$
-48
20
-18
20

repeating

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Writing Math

To write a repeating decimal, you can show three dots or draw a bar over the repeating part: $0.666\ldots = 0.\overline{6}$

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Write each fraction or mixed number as a decimal.

$6\frac{1}{3}$

$.33\ldots$
$3\overline{)1.00}$
-9
10

$6.\overline{3}$

Write each fraction or mixed number as a decimal.

$\frac{5}{20}$

$.25$ D/N
$20\overline{)5.00}$
-40
100

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Write each fraction or mixed number as a decimal.

$7\frac{2}{3}$

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A **terminating decimal**, such as 0.75, has a finite number of decimal places. A **repeating decimal**, such as 0.666..., has a block of one or more digits that repeat continuously

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Common Fractions and Equivalent Decimals

$\frac{1}{5}$	$\frac{1}{4}$	$\frac{1}{3}$	$\frac{2}{5}$	$\frac{1}{2}$	$\frac{3}{5}$	$\frac{2}{3}$	$\frac{3}{4}$	$\frac{4}{5}$
0.2	0.25	$0.\overline{3}$	0.4	0.5	0.6	$0.\overline{6}$	0.75	0.8

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Order the fractions and decimals from least to greatest.

$\frac{3}{4}$, 0.8, $\frac{7}{10}$ .80 .75 0.70 $\frac{7}{10}, \frac{3}{4}, 0.8$

Order the fractions and decimals from least to greatest.

$\frac{1}{2}$, 0.35, $\frac{1}{4}$ 0.50 0.25 $\frac{1}{4}, 0.35, \frac{1}{2}$

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Write each decimal as a fraction or mixed number.

1. 0.24

2. 6.75

Write each fraction or mixed number as a decimal.

3. $2\frac{3}{5}$

4. $\frac{7}{8}$

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